

Release Note 86

System: Honeywell TIP 424 (from 420)

Date of Release: 1 March 1980

1. Patches to version 420 and several minor bug fixes were incorporated notably including:

- a) making the New Telnet options Desires Binary In and Desires Binary Out the default options for ports after reset;
- b) disabling limbo type close in favor of a normal close (until the reconnection protocol between TIPs and Tenexes is made to work);
- c) two changes that prevent runaway breaks (from terminals) from degrading TIP service by first, checking for connection open instead of just for connection not closed when processing a break, and second, not queuing a (New Telnet) break if a port already has more than four items queued;
- d) removal of TENEX-C from the table of news servers and fixing the news function under Old Telnet;
- e) increasing the data link timeout from 1/3 seconds to 8 seconds, which prevents multiple transmissions of data;
- f) sending a bit pattern for break (ASCII NUL with stop bits '10') to a terminal on receipt of a New Telnet Break command from the Host;
- g) not "echoing" the NUL inserted after carriage return if the Insert Linefeed option has been cleared (New Telnet only).

2. New terminal commands for starting and stopping XON-XOFF flow control have been added. The commands for the terminal to TIP direction are

```
@Flowcontrol Input Start
@Flowcontrol Input End
```

and for the TIP to terminal direction are

```
@Flowcontrol Output Start
@Flowcontrol Output End
```

The new commands will be activated by optional packages for input and/or output (the two are independent); if a package is not present on a TIP, the response will be the message "Can't". This release provides the foundation for these commands, but requires further work before they may be used. The package for input XON/XOFF flowcontrol has not yet been implemented; the package

for output XON/XOFF flowcontrol must be modified to activate the commands.

3. A new error message, "TIP problem. Please call 617-661-0100", has been added for diagnostic purposes. A TIP programmer may activate this message when a port displays inexplicable behavior in the hope that the user will be able to provide information about the situation.

4. A Device Rate Permanent bit has been allocated. It can be selected for a port by a site parameter. There will be a later patch to activate the code for this feature, which will prevent the @device rate command from changing the rate on such ports.

5. The "dumping" feature used by TIPSTAT was removed; this capability is now provided under the network utility program and no longer requires special TIP code. A savings of approximately 200 (octal) words of memory will be used in the implementation of TIP Login.

6. Macros for site parameters have been modified to accept port numbers in octal instead of decimal for convenience.

7. Extensive internal changes were made including:

- a) format changes to improve readability;
- b) automatic assignment of page zero constants to appropriate literals (PZCON file);
- c) introduction and enhancement of various macros, some of which now provide consistency checks and assembly time diagnostic messages;
- d) separation of "TRAP LOCATIONS" and "USEFUL LOCATIONS" in the list of such locations produced by assembly;
- e) loading of certain page zero constants which had been set at TIP initialization;
- f) correction of interrupt level indicators.